

METHODS AND APPARATUS FOR PASSIVE SHIMMING OF MAGNETS

ABSTRACT OF THE DISCLOSURE

A method for shimming a magnetic field of a magnet in a volume of interest, utilizing ferromagnetic pellets for shimming. The pellets are positioned in a nonmagnetic holder having a predetermined number of pellet holes. The method includes measuring the magnetic field of a magnet in a plurality of locations within the volume of interest, determining a nominal passive shimming mass to compensate the measured magnetic field to approximate a desired magnetic field within the volume of interest; and placing a combination of ferromagnetic pellets from a selection of full strength pellets, nearly full strength pellets, and low strength pellets in the pellet holes to approximate the nominal passive shimming mass.